

Agricultural Situation

OCTOBER 1959
Vol. 43, No. 10

Agricultural Marketing Service
U.S. Department of Agriculture

MILK PRODUCTION PATTERN IS SHIFTING

In the past 20 years our farmers have made a substantial shift in the seasonal pattern of milk production. During that time, production of milk has increased in all months of the year, but the increase has been much greater in the late fall and winter months than in the late spring and summer months.

To accomplish the shifts in monthly output of milk, farmers have had to overcome at least two natural elements. First, to attain high level production in the out-of-pasture season requires not only ample quantities, but improved qualities of feed, especially of roughages. Over the years farmers have increased the proportion of alfalfa in their total hay supplies.

Along with this, improvements in mechanization have permitted the har-

vesting of this improved roughage in a manner to preserve more of the nutrients contained in the growing plant. Not only does the finished product contain a larger quantity of digestible nutrients per pound, but its palatability is enhanced so that cows will consume greater quantities.

The natural tendency for cattle to breed for spring calving had to be overcome. This has been made easier with improved feeds and feeding practices. But to adhere consistently to a fall calving schedule requires careful herd management. The incentive for doing this, of course, lies in the fact that under most farm conditions a cow which calves in the fall of the year will produce more milk for the lactation as a whole than if she freshens in the spring.



This is primarily because barn fed cows are more likely to be on "full feed." During the pasture season they depend mainly upon supplies of pasture feeds to supply their total roughage intake. This is particularly true in the summer and early fall.

The opportunity to obtain more milk from an animal freshening in the fall carries with it the opportunity for greater net income from that animal.

Production Difference

It is generally believed that a dairy animal calving in the fall will produce around 10 percent more milk than if she calves in the spring. No doubt costs are also increased somewhat, but not as much as cash receipts.

A strictly monetary inducement for farmers to shift has been the fact that prices received for milk customarily have been higher in the fall and winter than in the spring and summer. The extent of this difference of course, varies considerably among sections of the country and is dependent partly on whether the farmer sells milk for fluid use or for manufacturing purposes.

Before World War II, there were pronounced seasonal changes in prices for both fluid milk and milk for manufacturing. But in most years of the past decade prices of milk for manufacturing have been at support levels much of the time, and seasonal variation has been much smaller.

The price of milk in fluid markets fluctuates from month to month. The fluctuation is caused by changes in prices for milk used for various purposes and because of changes in the relative amounts used for each purpose. Fat tests also vary by months, helping to bring about seasonal variation in the price received by farmers.

Over the years the tendency has been for each fluid milk market to maintain a price program that induces both an ample supply of milk and an acceptable seasonal distribution of that supply. To accomplish this, a number of markets have adopted special price incentives to induce farmers to deliver a larger quantity of milk in the late summer and fall.

A range of pricing devices has been employed and many have resulted in substantial shifts in the seasonal pattern of milk deliveries. Shifts in the seasonal pattern of production almost invariably lead to a greater total annual output.

A single dairy farmer running an average size herd can shift his seasonal pattern without having a significant effect on the price pattern for the year. He may be able to get a dollar or more per hundred-weight in the fall over what he receives in the spring and summer. Almost without exception his costs would not increase as much so his net would be improved substantially.

But . . .

As more farmers shift their production pattern, however, the seasonal increase in prices from spring to fall will tend to be reduced. This has happened in individual markets and in the sum total of all markets for the United States as a whole. Nevertheless, in terms of the U.S. average price, there is still a substantial incentive to increase production of milk more in the fall and winter than in the spring and summer.

This incentive, together with the opportunity to gain increased output, probably will lead to further changes

The Agricultural Situation is sent free to crop, livestock, and price reporters in connection with their reporting work.

The **Agricultural Situation** is a monthly publication of the Agricultural Marketing Service, United States Department of Agriculture, Washington, D.C. The printing of this publication has been approved by the Bureau of the Budget (January 8, 1959). Single copy 5 cents, subscription price 50 cents a year, foreign \$1, payable in check or money order to the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.



in the seasonal pattern of milk production in the near future.

Monthly production of milk varies over the year from region to region. There are also differences among regions in the way in which the seasonal pattern of production has been readjusted over the past 20 years.

As would be expected, the Southern regions of the country usually reach a peak in their annual production earlier than the Northern regions. Today, the South Atlantic (W. Va., Md., Del., Va., N.C., S.C., Ga., and Fla.) and South Central States (Tex., Okla., Ark., La., Miss., Ala., Ky., and Tenn.) are producing more milk in May than in June. All the other regions are still producing more in June than in May. But, all regions have shown a definite shift to earlier seasonal peaks in their annual output.

Peak

From 1929 through 1945, monthly production of milk in the United States was greatest during June. From 1946 through 1951, May and June fluctuated as the highest months of productions. Beginning with 1952, more milk was produced in May than in any other month of the year.

At the present time farmers are producing 22 percent more milk during May than the average for the 12 months of the year. The low month of the year is November. In this month, total production is running 15 percent below the average of the 12 months.

To some degree, the shift in the seasonal pattern of milk production is a result of the shift in milk cows among regions. The West North Central States (N. Dak., S. Dak., Minn., Nebr., Kans., Iowa, and Mo.) and three of the Southern Plain States (Okla., Tex., and Ark.) show the largest drop in milk cow

numbers on farms. The South Atlantic States, four of the other Southern States (Miss., Ala., Tenn., and Ky.), and the North Atlantic States (Pa., N.Y., N.J., Conn., Mass., R.I., N.H., Vt., and Maine) show a gain in relative numbers of milk cows.

When the South Atlantic States, where an earlier seasonal peak is attained, receive relatively more weight than the West North Central States, a region of a later peak, the U.S. average tends to be moved earlier in the year.

Herbert Kriesel
Agricultural Economics Division, AMS

CATTLE—AT A GLANCE

Cattle numbers will set a new high mark this year. So far, the rapid growth in numbers has meant smaller slaughter supplies and higher prices. As the build-up progresses and the rate of expansion eases off, increases in marketings and lower prices are probable.

Marketings of well finished cattle could be heavy at times this fall. On July 1, the number of cattle and calves on feed in 13 States was record high for that date, 10 percent above July 1958. But marketings have remained at about last year's rate and placements have been up.

Stocker and feeder cattle and calves shipped into 9 North Central States during August totaled 444,460 head, 22 percent more than during August 1958. Total inspected shipments of stocker and feeder cattle and calves from public stockyards during August amounted to 438,482 head, 4 percent more than during August 1958.

Large price declines are unlikely, however, because supplies of grass cattle probably will continue at a reduced level.

HYBRID SORGHUM GAINS IMPORTANCE

Hybrid seed has been proved superior for many crops. The most noteworthy and longstanding is corn, but sorghum hybrids have recently attained great importance.

The commercial use of hybrid sorghum seed in this country has increased in four years from almost nothing to about two-thirds of the acreage in 1959. This is in sharp contrast with hybrid corn which has been important for a quarter century. At present, nearly all U.S. corn is grown from hybrid seed. Ten years ago about three-fourths of the acreage was planted with hybrids and even 20 years ago about a fourth of our corn was hybrid.

It is relatively easy to produce hybrid corn seed because the male and female flower parts grow on separate sections of the plant—pollen in the tassel and the female parts in the ear. In commercial seed production, it is customary to plant every fourth or fifth row to the male parent for a pollinator and all other rows to the female parent. All tassels are pulled from the female rows so they will be pollinated only by the desired male parent.

In the sorghum plant, however, like most other grasses, the flower parts grow together in the same head and it is difficult to remove only the stamens which produce the pollen.

Development

Sorghum hybrids have been studied at experiment stations for at least 40 years. The commercial production of hybrid seed, however, was not realized until recently through the use of male-sterile stock crossed with normal stock. The use of male-sterile stock has the same effect as detasseling the female parent in corn. The first male-sterile sorghum was discovered in 1929 and work on the production of hybrid seed has been continuous since that time. For commercial production it was necessary to develop male-sterile strains with desirable characteristics for parent stock. This was accomplished by 1954. By 1957 enough hybrid seed was available to plant about a fifth of the

very large sorghum acreage planted that year.

Sorghum is a versatile plant with many uses. It is drought resistant and will provide some production even under adverse conditions where most other crops would fail. Under favorable conditions yields are heavy.

Uses

The various varieties of sorghum provide grain, silage, forage, hay, sirup, and broom fiber (broomcorn). Most of the sorghum grain production comes from the various varieties of milo and kafir and their hybrids. The sweet sorghums are the sorgo group. The most popular is named atlas sorgo and is a cross between a sorgo and a kafir. The pure sorgos have sweet stalks but small, bitter seeds. Atlas, however, has strong sweet stalks and palatable white seeds and is the principal sorghum for forage and silage.

The two grassy types—Sudangrass and Johnsongrass—are used mainly for hay and pasture. Johnsongrass is the only perennial sorghum and in some areas is considered a noxious weed.

The crop of sorghum grain in 1958 was an all-time record high of 615 million bushels. The 1959 crop is estimated at 566 million bushels, second only to 1958. The three large crops in 1957-59 established a new high level of production which is about 10 times as large as the level in the early thirties.

Sorghum silage is second to corn silage in importance. The production of sorghum sirup has declined from a level of around 20 million gallons a year in the early thirties to less than 3 million gallons during the past three years.

In the U.S. practically all sorghum production is used for animal feed. The exceptions are sorghum sirup and broomcorn. In Africa and Asia, however, the principal use of sorghum is for human food.

E. O. Schlotzhauer
Agricultural Estimates Division, AMS



OUTLOOK

Feed

Improved production prospects for feed grain mean a further buildup in carryover during the 1959-60 feeding year (began October 1). The feed grain crop of 166 million tons indicated in early September, tops the 1958-59 record supply by 5 percent . . . the 1953-57 average by a fourth. Carryover from former crops is about 68 million tons, 9 million more than a year earlier. Adding in byproduct feeds and wheat and rye expected to be fed brings the total feed concentrate supply 7 percent above that for the feeding season just closed.

Feed use is running at a record pace. Because of increased livestock production and heavy rates of feeding, disappearance in the United States is estimated at 11 percent over 1957-58 . . . exports are up a fourth. Domestic use and exports will stay high in 1959-60, but increase in supply is expected to push carryover up around 12 million tons by October 1, 1960.

The bumper corn crop is a major cause of the increase in feed grain supply. The increasing carryover of grain is also a factor in the large supply. Acreage for harvest is up 15 percent . . . yields are slightly above last year to a record 51.9 bushels per acre. Crop is estimated at 4.4 billion bushels, nearly 600,000 above last year. Sorghum grain production is down 8 percent from the 1958 record though still large. The oats crop is down nearly a fourth and below average. Barley production is down 13 percent from last year, but well above average.

Feed grain prices received and paid by farmers are running a little below a year ago. Seasonal declines are likely for corn and sorghum grain this fall.

Farm Income

Realized net farm income of farm operators—the amount farmers have available after they've paid their production expenses—for the first 3 quarters of 1959 was at an annual rate 11.5 billion dollars. This was 1.6 billion lower than the rate in the same period of 1958, but half a billion above the 1957 total.

Lower average prices, increased production expenses, and discontinuance of acreage reserve payments are main factors in the decline from last year. An additional factor in the third quarter was reduced marketings of wheat, oats, and barley because of smaller crops.

Hogs

The latest pig crop report indicates reduced production in the early part of 1960 (see the story on page 12).

Cattle

(See the story on page 3.)

Eggs

Production is likely to fall below a year earlier by early 1960. This is indicated by 5 percent fewer potential layers on farms September 1. During the rest of this year, output is likely to continue close to 1958.

Broilers

Prices dipped further in the first half of September. Supplies of competing red meats have increased and demand for broilers has passed its summer peak.



OUTLOOK

Soybeans

Farm prices around the 1959 support of \$1.85—national average—are likely during the harvesting season. Last fall, prices averaged \$1.93. Chances for a seasonal rise are good if crusher and export demand turn out as strong as currently expected.

Flaxseed

Crop in prospect is smallest since 1946 and less than domestic requirements. Although carryover is up, total supply is well below last year. Tighter supply and a strong world demand mean that prices in 1959-60 are likely to average well above the \$2.69 received by farmers last season.

Wheat

Prices through the first part of September held closer to support than is usual at that time of the year. Some types were above support. Price strength came from relatively low rate of marketing so far this season.

Fruit

Prices of deciduous crops on the fresh market in early fall probably will continue under 1959. Supplies will be seasonally heavy with the pear, grape, and cranberry crops larger than last year. Apple production will be down from 1958, but still large. Supplies of citrus fruits will increase during the fall as harvest gets underway. In early September, prospects were generally favorable for the new crops.

Cotton

Production and use appear likely to be in fairly close balance in 1959-60. Crop this year is estimated at 14.6 million bales, 3.2 million larger than last year, and largest since 1953. But the

increase in domestic use and exports is expected to be as large as the gain in output.

Tobacco

Flue-cured sales are bringing higher prices than last year. Average for the Georgia-Florida markets set a new record. In most other Belts where auctions have not been completed, prices through mid-September were running above a year ago.

This year's flue-cured crop is 5 percent above 1958, 11 percent below 1948-57 average. But total supply is slightly below 1958 because of 4 percent reduction in carryover.

Dry Beans and Peas

If present production prospects materialize, supplies of dry beans in the 1959-60 marketing season will be slightly larger than those of the current season. Price support rates are substantially lower, and barring another season of strong export demand, prices received by growers for dry beans are expected to average substantially below those of the previous season. The larger supplies of dry field peas are expected to move at prices materially below those of the 1958-59 season.

Vegetables

If supplies of fresh market vegetables are about in line with early indications prices received by growers are likely to average somewhat above the levels of last fall.

Potatoes

Supplies for fall and winter are expected to be well below last year's burdensome level. Fall crop is estimated to be down 7 percent. The late summer crop also is smaller.

Farmer's Share

The farmer's share of the consumer's food dollar was 37 percent in July, 1 percent lower than in June. In July 1958 the farmer's share was 39 percent.

FARM INCOME— WHERE DO YOU STAND?

In 1958 the highest averages of realized net farm income per farm—the amount farmers have available after they've paid their production expenses—were concentrated in the North Central and Western regions. A look at the map will tell you where your State stood.

The highest average of all was \$14,580 per farm in Arizona. This was boosted by inclusion of Indian reservations as single farms. However, if the reservations were taken out, the average for Arizona would probably still be the highest in the country.

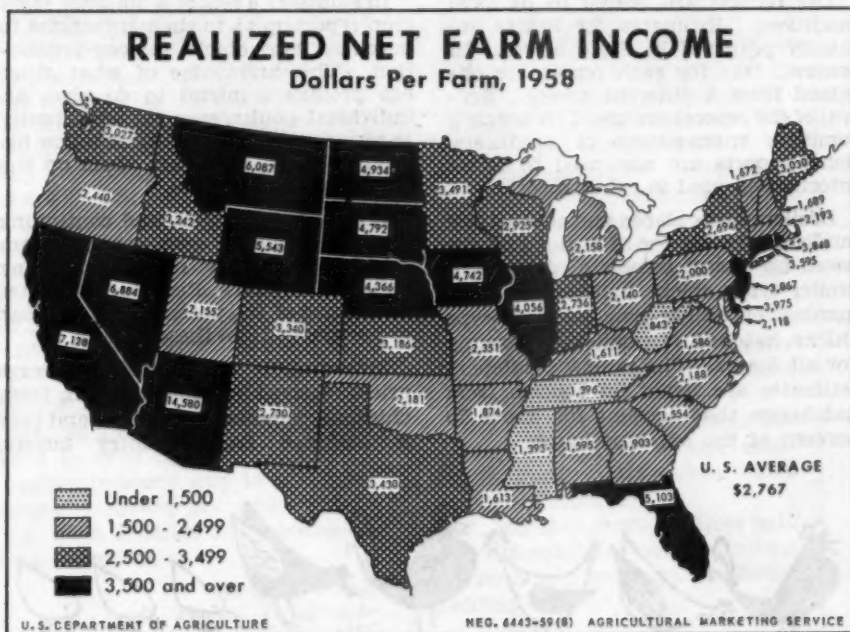
Second highest was California with an average net income of \$7,128 per farm. Nevada was third with \$6,884, and Montana fourth with \$6,087. Two other States had averages over \$5,000—Wyoming, fifth with \$5,543, and Florida, sixth with \$5,103.

Wyoming is the only one of these first six ranking States in 1958 which was not among the first six the previous year. Wyoming ranked tenth in 1957.

The lowest average realized net income per farm in 1958 was \$843 in West Virginia. Next lowest was \$1,393 in Mississippi. West Virginia probably has more part-time farming than any other State. After a bad year in 1957, Kansas farmers recovered handsomely in 1958, and average realized net income rose almost 350 percent from \$710 in 1957 to \$3,186 per farm in 1958.

Average realized net income per farm for the Nation as a whole rose 22 percent, from \$2,269 in 1957 to \$2,767 in 1958. Increases were recorded in 40 of the 48 States.

Ernest W. Grove
Agricultural Economics Division, AMS



DO YOU KNOW YOUR CHICKEN AND EGG REPORTS?

Are you having trouble keeping up with the ever-changing poultry situation? If you are, look at the box on the opposite page. It lists the reports your Crop Reporting Board issues on chickens and eggs. Of course, other USDA reports are issued in this subject too (Poultry and Egg situation, market news, research reports, etc.). All of these are helpful.

The Board's reports provide the poultry producer with a compass to chart a course to more efficient production and marketing. They are also widely used by others in the poultry industry, and government agencies. Economists use the reports to look into the future.

If you see a report you need, drop your State Statistician a line. He can send you a sample copy or have your name added to the mailing list.

As you can see, the Board publishes a variety of reports on chickens and eggs. The reports provide information on current developments as well as farmers' intentions.

The reports are geared to fit local conditions. Estimates for States are usually prepared in State offices. In general, data for each report are obtained from a different source. Several of the reports are based on nearly a complete enumeration of producers. Some reports are also used to check information used in other reports.

Broiler chicks placed and eggs set are published weekly for 22 States and are based on almost complete coverage of broiler-type chick hatcheries. The number of broiler-type and egg-type chicks hatched is published monthly for all States. The egg-type hatchery estimates are based on reports from hatcheries that account for about 70 percent of the egg-type hatch.

The preliminary estimates on chickens raised are based on a survey of about 150,000 farmers. These farmers report on their own operations. Rural mail carriers distribute questionnaires for the survey to farmers along their route. Statisticians also use hatchery data to help estimate the number of chickens raised.

Leading breeders of broiler-type chicks report pullet chick placements for broiler hatchery supply flocks. This report provides an indication of the potential broiler hatchery supply flock several months in advance.

The monthly pullorum testing report gives an indication, just prior to the egg producing period, of the number of layers to be added to hatchery supply flocks.

Monthly egg production estimates are based on data obtained from about 40,000 general crop reporters and 8,000 commercial poultrymen. Rate of lay and average number of layers are published monthly.

In February a report is obtained from crop reporters as to their intentions to purchase baby chicks for egg production. This knowledge of what other egg producers intend to do gives an individual poultryman an opportunity to review his plans and either follow his original plans or change them on the basis of this knowledge.

Beginning in August and continuing through January crop reporters are asked to report the number of young pullets on hand. Regional estimates of the size of the potential laying flock are prepared from these reports.

Information to determine average prices received by poultrymen for farm chickens, commercial broilers, and eggs is obtained from country buyers,



dealers, egg auctions, and producers. Prices received by farmers and production data enable producers to evaluate the situation and adjust production accordingly.

Reports on average prices for various types of poultry feed and for chicks are based on information obtained primarily from feed dealers and hatcherymen. The comparisons of prices for eggs and for poultry meat with feed cost, permit the computation of commodity-feed price ratios.

On January 1 information is obtained from poultrymen on the average price of hens and pullets of laying age and on all other chickens on farms. These prices are used in computing inventory values of poultry on farms January 1. The January 1 inventory estimates of number are based on a sample of about 150,000 farmers. These estimates provide the starting point for the monthly estimates of layer numbers.

The disposition reports for chickens, eggs, and broilers are annual summaries of the estimates in many of the reports listed above. The disposition reports not only show total production separated as to sales and home consumption, but also include prices received, cash receipts, and gross income by States and for the Nation.

The liquid, frozen, and dried egg production report gives the estimated output of all egg breaking plants. This report gives production by classes of product for both dried eggs and for liquid eggs. The canned and eviscerated poultry report covers poultry canned or used in canning in the Nation. Both this report and the liquid, frozen, and dried egg report are based on virtually complete enumerations of their respective segments of the industry.

The present comprehensive reporting program is constantly reviewed and modified to keep up with changes in the poultry industry and to meet the increasing demands for new reports and for more detailed breakdowns of existing estimates.

Alvin K. Potter
Harold V. Edwards

Agricultural Estimates Division, AMS

Crop Reporting Board Chicken and Egg Reports

1. Chickens on farms on January 1 by classes, value per head, and total value, by States (published in February).

2. Number of layers, rate of lay, and total egg production by States (published monthly).

3. A preliminary estimate of the number of chickens raised, by States (published in July).

4. Farmers' intentions to buy baby chicks by geographic areas (published in February).

5. Composition of farm flocks on October 1, by geographic areas (published in October).

6. Potential layers on farms by geographic areas August 1, September 1, October 1, November 1, December 1, and January 1.

7. Annual estimates of production, disposition, cash receipts, and gross income from chickens and eggs by States (pub. in April).

8. Monthly chick hatchery production by States.

9. Chicks placed for broiler production and eggs set in 22 States (published weekly).

10. Annual estimate of commercial broiler production, price, and value, by States (pub. in April).

11. Monthly production of liquid, frozen, and dried eggs.

12. Canned and eviscerated poultry produced under inspection (published monthly).

13. Chickens tested by official State agencies by States (published monthly).

14. Leading breeder report on pullet chicks placed for broiler hatchery supply flocks (published monthly).

15. Monthly average prices received for farm chickens, commercial broilers, and eggs by States (published monthly).

16. Monthly average prices paid by poultrymen for poultry rations and for chicks by States (published monthly).



FEEDING LAMBS?—WATCH FEED PRICES

It pays livestock producers to watch feed prices. (See the August issue of *Agricultural Situation*.) Sheep and lamb producers are no exception. If you're feeding lambs, you'll benefit by watching the ever-shifting prices of the different grains and meals—and weighing their relative feeding values.

Prices of grains and meals are affected by many forces—and often change rather sharply. Taking advantage of these wide swings in prices by using the feeds which are the best buy in terms of feeding value can often mean the difference between profit and loss in lamb feeding, as well as in feeding other kinds of livestock.

Of course, lamb rations should be well balanced and changes in the ingredients usually should be made slowly and in line with good nutritional and management practices.

Comparisons are shown here for a number of lower protein feeds and corn and for some of the high-protein feeds and soybean meal. They take into account the feeding value of the various feeds when fed to lambs. The prices in the tables do not, however, allow for grinding or other processing that may be necessary for one feed, but not for another. The comparisons given here assume feeding is done in

(continued on page 12)

Equivalent Values of Feeds for Fattening Lambs ¹

	When the price of corn per bushel is—						
	\$0.80	\$0.90	\$1.00	\$1.10	\$1.20	\$1.30	\$1.40
Oats (bu.).....	.37	.41	.46	.50	.55	.59	.64
Barley (bu.).....	.60	.67	.75	.82	.89	.97	1.04
Wheat (bu.).....	.73	.82	.91	1.00	1.09	1.18	1.27
Sorghum grain (100 lbs.).....	1.43	1.61	1.79	1.96	2.14	2.32	2.50
Hominy feed (ton).....	28.55	32.15	35.70	39.30	42.85	46.45	50.00
Dried beet pulp (ton).....	25.70	28.90	32.15	35.35	38.55	41.80	45.00
Wet beet pulp (ton).....	4.30	4.80	5.35	5.90	6.45	6.95	7.50
Wheat bran (ton).....	25.70	28.90	32.15	35.35	38.55	41.80	45.00
	When the price of soybean meal per ton is—						
	\$45.00	\$50.00	\$55.00	\$60.00	\$65.00	\$70.00	\$75.00
Cottonseed meal (ton).....	40.00	44.45	48.90	53.35	57.75	62.20	66.65
Linseed meal (ton).....	45.00	50.00	55.00	60.00	65.00	70.00	75.00
Peanut meal (ton).....	45.00	50.00	55.00	60.00	65.00	70.00	75.00
Gluten meal (ton).....	40.00	44.45	48.90	53.35	57.75	62.20	66.65
Distillers dried grains (ton).....	40.00	44.45	48.90	53.35	57.75	62.20	66.65

¹ Prices that can be paid for specified feeds at various levels of corn and soybean meal prices after adjusting for weight of the unit used and feeding value.

CORN OIL HAS BECOME AN IMPORTANT FARM BYPRODUCT

Have you ever wondered how much oil a bushel of corn can yield? Corn refiners' yields average around 1.8 pounds.

These refiners or "wet" millers probably will grind about 150 million bushels of corn this year. If they do, around 300 million pounds of corn oil is going to be produced. That would be twice as much as was produced 20 years ago and an all-time high. (Output of cottonseed oil, the major competitor, is expected to total around 1,600 million pounds.)

Corn oil—most of which is used as salad and cooking oil—is a byproduct of the corn products industry. The refiners (they manufacture starch, sirup, sugar, feed, and oil) produce about 95 percent of our corn oil. The rest is produced by "dry" millers (they produce breakfast foods, corn meal, hominy grits, flour, feed, and oil) and distillers (they make whiskey and industrial alcohol).

The refiners use the wet milling process to separate the germ, hull, gluten, and starch from the corn kernel. The main product is corn starch.

Corn oil is produced from the germ of the corn kernel. In the early days of the industry the general practice was to dispose of germ material by adding it to feed products. But as the demand for vegetable oils increased, it was found profitable to extract the oil from the germ.

After oil extraction, the germ residue is ground and marketed as corn germ meal or may become a part of corn gluten feed or meal.

Most of our crude corn oil is refined to produce a food oil. During the past 5 years, 91 percent of the corn oil was used in food products. The rest went into nonfood uses, primarily as foots which are used in the manufacture of soap.

Corn oil has special qualities which make it an excellent cooking oil and salad oil. It is used either directly as such or as a base for mayonnaise, salad dressings, and other products using oil. Corn oil is also used in the production of potato chips, doughnuts, and some other bakery products. During the past year, increasing quantities of corn oil have been used in margarine. While the total quantity is relatively small, the rate of growth has been large.

Prices of crude corn oil at Midwest mills have been pretty stable since 1951. The average annual price has varied between 13 and 14 cents a pound. Corn oil prices weakened during the first 8 months of 1959—averaging 12 cents a pound. These lower prices are attributed to the decline in prices of other competitive salad and cooking oils and some buildup in corn oil stocks.

Corn oil prices are determined more by the price of cottonseed oil than by other economic factors such as the cost of producing corn oil. The price of corn oil varies closely with changes in prices of cottonseed oil and other competing oils. Crude corn oil prices have run just a shade above crude cottonseed oil prices in most years since 1946.

It looks like there will continue to be a steady growing demand for corn oil.

George W. Kromer
Agricultural Economics Division, AMS



WHAT'S THE HOG PICTURE IN THE CORNBELT?

Let's take a quick look at the hog picture in 10 Corn Belt States. These States—Ohio, Ind., Ill., Wis., Minn., Iowa, Mo., S. Dak., Nebr., and Kans.—accounted for 75 percent of the pig crop in 1958.

1. The number of sows farrowed and expected to farrow in the fall of 1959 is now estimated at 4.5 million head, 5 percent larger than in 1958, and 23 percent above the 1948-57 average.

2. Reports indicate 2 million sows to farrow during the 1960 winter quarter (December 1959 through February 1960), 4 percent less than last year's unusually large farrowings in this period.

3. The number of hogs and pigs on farms on September 1 in 9 of the States totaled 47,286,000 head, 5 percent more than a year earlier.

Sows farrowed and expected to farrow during June through November are above a year earlier in 8 of the States, but below last year in Wisconsin and South Dakota. Increases are 9 percent in Minnesota, 8 percent in Missouri, 7 percent in Iowa, 6 percent in Ohio, 4 percent in Illinois, and 1 percent in Indiana, Kansas, and Nebraska.

The June-August farrowings in the 10 States totaled 2,426,000 head, 4 percent more than during the same period a year earlier. June-August farrowings for the 10 States represent 54 percent of the estimated June-November total farrowings compared with the average of 50 percent. Farmers' reports indicate the number of sows farrowed in June and July were larger than for the same months a year earlier while August farrowings declined slightly.

Sows bred and intended for farrowing in September, October, and November this year in the 10 States totaled 2,075,000 head. This amounted to 5 percent more than a year earlier and 14 percent above average.

Five of the States—Ohio, Illinois, Wisconsin, Iowa, and South Dakota—indicate the same number of sows will be farrowed during this quarter as far-

rowed a year earlier. Decreases in farrowings ranging from 3 to 22 percent are intended in the other 5 States—Missouri, Nebraska, Kansas, Indiana, and Minnesota. The decrease in intentions to farrow sows is generally in the Western Corn Belt and may reflect the reduced outlook for feed grain prospects in that area. Nationally, feed grain prospects are slightly above 1958 record yields.

Wisconsin was the only one of the 9 States for which comparable data are available that had less hogs on farms this September than a year earlier. The increases range from 2 percent in Indiana to 8 percent in Nebraska. Hogs and pigs 6 months old and over totaled 8,640,000 head, 6 percent more than a year earlier. This reflects the increase of sows and gilts held for fall farrowings. The number of hogs under 6 months was 4 percent more than last September. Pigs 3 to 6 months of age were 5 percent above those held a year earlier. Pigs under 3 months of age were 3 percent above a year earlier while sows farrowed June-August were 4 percent above last year. This indicates a decrease in litter size compared with a year earlier.

H. V. Edwards
Agricultural Estimate, AMS

LAMBS—Continued

balanced rations. They do not necessarily apply if the individual feed makes up an exceptionally large part of the ration.

The table may be considered as a guide—not as an exact measure of the relative worth of the various feeds. It indicates, for example, that under normal feeding practices, a farmer can get as much feed value for his money in fattening lambs from barley at about 82 cents a bushel as from corn at \$1.10 a bushel. If the price of barley is much lower than this (with corn at \$1.10), it is a cheaper feed than corn; if it is much higher, corn is a cheaper feed.

Malcolm Clough
Agricultural Economics Division, AMS
Earl F. Hodges
Farm Economics Research Division, ARS

LET'S TAKE A LOOK AT LIVESTOCK-FEED PRICE RATIOS

The cost of feed is an important item in the production of most livestock and poultry products. So when feed prices are rising more than livestock prices, it usually means less net returns for the livestockmen.

How high or how low feed prices are when compared with livestock prices is shown here in terms of ratios between prices of hogs, beef steers, milk, and eggs, and prices of important feeds used in producing them. The charts show that prices of beef steers and milk are above average compared with feed prices. But hogs and eggs have fallen below average this summer in relation to the cost of feed.

Hogs

How are these ratios computed? The hog-corn ratio is computed by dividing the price of hogs per 100 pounds by the price of corn per bushel. When the price of hogs is favorable compared with corn, the ratio is high. The ratio is shown here based on the average prices received by farmers for corn and hogs. In August the average price of hogs was \$14.00 per 100 pounds and corn was \$1.13 per bushel. Fourteen dollars divided by \$1.13 gave an average price ratio of 12.4. In other words, 12.4 bushels of corn was equal in value to 100 pounds of hog, liveweight. The 1948-57 average ratio is about 13.4.

When the hog-corn ratio is above average hog producers tend to expand hog production since hog prices are favorable in relation to corn prices. When the ratio drops very much below average, producers tend to reduce hog production.

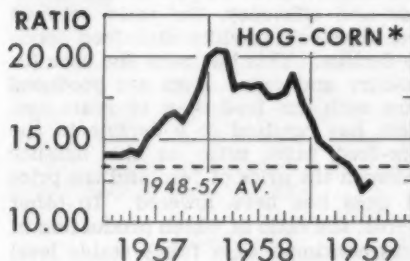
As shown here, the ratio was above average in 1957 and increased to a very high level in 1958 when hog prices were unusually high in relation to corn. From the fall of 1958 through the first half of 1959 the hog-corn ratio declined rather sharply, falling below the 10-year average by mid-year.

In response to the favorable ratio in 1957 and 1958, hog producers have been raising more pigs. Hog production in 1959 is at a much higher level than in 1957.

The hog-corn ratio is one of the more reliable indicators of future changes in livestock production. This is because corn makes up a large percentage of the cost of producing hogs. In general, the more important the feed is in the cost of producing livestock, the more significant the ratio is as an indicator of changes in livestock production.

Steers

The beef steer-corn price ratio indicates future cattle feeding less accurately than the hog-corn price ratio indicates future hog production. This is because corn is less important in the total cost of producing grain-fattened steers. The beef steer-corn price ratio is based on Chicago prices of No. 3 Yellow corn and all grades of beef steers sold out of first hands for slaughter. The beef steer-corn ratio has been substantially above average during most of the past 2 years. During this time, cattle feeders have had a record number of beef cattle on feed for market in response to the relatively favorable returns from feeding cattle.

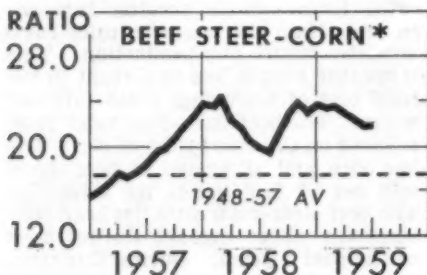


* BUSHELS OF CORN EQUIVALENT IN PRICE TO 100 POUNDS OF HOG

The milk-feed price ratio is the ratio between the price received by farmers for milk and the value of a typical dairy feed mixture. This is also a less accurate indicator than the hog-corn price ratio since dairymen rely to a considerable extent on hay, silage, and pasture in feeding dairy cows.

In the milk-feed price ratio, and also the egg-feed price ratio, there is a rather significant seasonal variation. Milk prices tend to be high compared with feed prices during the winter months and low in the summer.

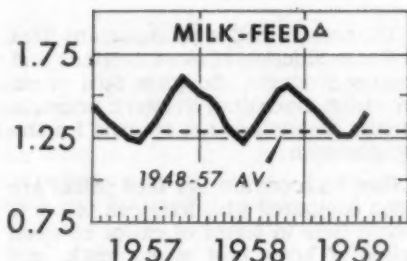
The milk-feed price ratio has been above the 10-year average during the past 3 or 4 years. The relatively higher level of milk prices as compared with feed costs has been a factor in encour-



* BUSHELS OF CORN EQUIVALENT IN PRICE TO 100 POUNDS OF BEEF STEER

aging liberal feeding of dairy cows. In 1959, farmers have been feeding record quantities of grain and other concentrates to their dairy cows.

Whenever there has been a substantial improvement in production methods and efficiency, the ratio between the livestock product and feed tends to decline. This has been the case for poultry and eggs. Eggs are produced now with less feed than 10 years ago. This has resulted in a decline in the egg-feed price ratio as the balance between the price of feed and the price of eggs has been lowered. In other words, the ratio at which production of eggs continues at a fairly stable level is somewhat lower now than it was 10 years ago. This is also true of the



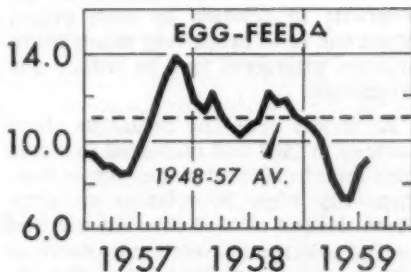
Δ POUNDS OF RATION EQUAL IN VALUE TO 1 POUND OF MILK

broiler-feed price ratio, which has shown a definite downward trend over the past several years and to a lesser extent for the chicken-feed and turkey-feed price ratios.

The egg-feed price ratio was generally favorable in late 1957 and in the early part of 1958. Since that time, the egg-feed price ratio has declined rather sharply reaching the lowest level in 20 years in the spring of 1959.

Less favorable returns from poultry production this year have been reflected in the reduction in the number of chickens raised for laying flock replacement. A reduction in the size of farm laying flock is in prospect during 1959-60.

Malcolm Clough
Agricultural Economics Division, AMS



Δ POUNDS OF RATION EQUAL IN VALUE TO 1 DOZEN EGGS

"Bert" Newell's Letter

Did you ever have a job you hated to do, so you put it off, and put it off? Sure, I bet you have, everybody has. With me the worst part of it is the longer I put it off the worse it seems to get, and I conjure up all sorts of difficulties that just seem to make the job impossible. And then comes the day, I make up my mind and when the job is over the sun comes out again and all seems right with the world. Then I realize all at once how the procrastinating has influenced so many other things, like my disposition.

I don't know why I can't remember that these jobs are seldom anywhere near as tough as I imagined they were going to be. But, no, I seem to *have* to go through the process of worrying about them. I must be related to that little boy who liked to butt his head against the wall because it felt so good when he stopped.

I guess the answer is to make a definite decision and then go ahead. Often the real reason some jobs seem so difficult is that we lack the facts necessary to go ahead with some confidence. Farmers have to make decisions based on facts just like other businessmen. Most often these facts are in the form of statistics. But the problem of getting the necessary information on several million separate and independent agricultural businesses (farms) is more complicated and therefore much more difficult than with some other business operations.

Just to get a little perspective on the job, let's look at the number of independent business units involved. There are something like four-and-three-quarter million farms in the United States. We cannot possibly get a report from each of these, so we have to try to obtain a sample that fairly represents the whole universe.

To obtain such a sample, the statistician in your State and in each of the other States must endeavor to get a list of reporters in each area which, when put together, will give a good picture of the situation in the State as a whole. The real tough problem is to get a report from each respondent on that list. If we could be sure of getting a report from every one to whom an inquiry is sent, we could ease our job materially and provide even better statistics.

Now, let's compare this with the problem that would be encountered in collecting statistics on manufactures. According to the estimates of the Bureau of the Census, there were around 283 thousand manufacturing establishments in the United States in 1955; that is roughly one-seventeenth of the number of farms. Or, suppose we wanted to get some information on food manufacturing—a complete enumeration would involve around 42 thousand establishments. In our fall acreage survey we get reports on about 200 thousand farms and this is equivalent to nearly three-fourths of the total manufacturing establishments and about five times the number of all food manufacturing establishments. Now I am not saying that getting information on manufactures is easy. But getting statistics on agricultural production involves the Nation's biggest business. Farmers have many difficult decisions to make, and good basic facts are as necessary to them as to other businessmen. All that we in Agricultural Estimates are interested in, is providing good statistical information that will help you to make those difficult decisions without going through that period of worry when you deal with the unknown.

Well, now after this essay on procrastination, I am going home and surprise my wife by actually doing something about that 23-year old furnace before cold weather really sets in. (What is the best furnace and how much does one cost anyway?)

S. R. Newell

S. R. Newell
Chairman, Crop Reporting Board, AMS

UNIVERSITY MICROFILMS INC
313 N FIRST ST
ANN ARBOR MICH
334 9-19-58

In Thi

	Page
Milk Production Pattern Is Shift- ing -----	1
Cattle at a Glance -----	3
Hybrid Sorghum Gains Impor- tance -----	4
Outlook -----	5
Farm Income—Where Do You Stand? -----	7
Do You Know Your Chicken and Egg Reports? -----	8
Feeding Lambs?—Watch Feed Prices -----	10
Corn Oil Has Become an Im- portant Farm Byproduct ----	11
What's the Hog Picture in the Cornbelt? -----	12
Let's Take a Look at Livestock- Feed Price Ratios -----	13
"Bert" Newell's Letter -----	15

Permission Is Given To Reprint
Articles In This Publication

Editor: Nicholas Kominus

UNITED STATES
DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON 25, D.C.
OFFICIAL BUSINESS

POSTAGE AND FEE PAID
U.S. DEPARTMENT OF AGRICULTURE

